

## PATENT COOPERATION TREATY

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## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2351/PCT	<b>FOR FURTHER ACTION</b>		See Form PCT/PEA/416
International application No. PCT/B2005/000997	International filing date (day/month/year) 22.03.2005	Priority date (day/month/year) 25.03.2004	
International Patent Classification (IPC) or national classification and IPC INV. B60R22/14 B60R22/00 B60N2/28			
Applicant BRITAX ROMER KINDERSICHERHEIT GMBH et al.			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau a total of 2 sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 08.08.2005		Date of completion of this report 28.06.2006	
Name and mailing address of the international preliminary examining authority:  European Patent Office - Gitschiner Str. 103 D-10958 Berlin Tel. +49 30 25901 - 0 Fax: +49 30 25901 - 840		Authorized officer Busuiocescu, B Telephone No. +49 30 25901-530 	

**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/IB2005/000997

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**Box No. I Basis of the report**

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1. With regard to the **language**, this report is based on

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3(a) and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4(a))
  - ☐ international preliminary examination (under Rules 55.2(a) and/or 55.3(a))

2. With regard to the **elements\*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

**Description, Pages**

1-4 as originally filed

**Claims, Numbers**

1-12 received on 30.01.2006 with letter of 25.01.2006

**Drawings, Sheets**

1/3-3/3 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/IB2005/000997

**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes: Claims	4,5,8,9,10,12
	No: Claims	1,2,3,6,7,11
Inventive step (IS)	Yes: Claims	
	No: Claims	1-12
Industrial applicability (IA)	Yes: Claims	1-12
	No: Claims	

**2. Citations and explanations (Rule 70.7):**

**see separate sheet**

**Box No. VIII Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

**Re Item VIII.**

1. The application does not meet the requirements of Article 6 PCT, because claim 1 is not clear.

- 1.1 It is clear from the description on page 1 that the following features are essential to the definition of the invention:

The invention can not be defined by defining the shoulder pad itself.

The shoulder pad solves the problem disclosed in the application by being mounted to the seat belt in the specified position.

A safety system comprising the seat belt and the shoulder pad is needed to solve the problem.

Since independent claim 1 does not comprise the seat belt with the mounted shoulder pad, it does not meet the requirement following from Article 6 PCT taken in combination with Rule 6.3(b) PCT that any independent claim must contain all the technical features essential to the definition of the invention.

**Re Item V.**

1. Reference is made to the following documents:

D1 : DE 88 08 298 U1 (ELBERN, CHRISTA, 1000 BERLIN, DE) 27 October 1988 (1988-10-27)

D2 : US 2003/046750 A1 (D'ADDARIO JAMES ET AL) 13 March 2003 (2003-03-13)

2. INDEPENDENT CLAIM 1

- 2.1 Furthermore, the above-mentioned lack of clarity notwithstanding, the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT, and therefore the criteria of Article 33(1) PCT are not met.

Document D1 discloses (the references in parentheses applying to this document):

A shoulder pad (1)

for use with a vehicle seat belt or harness strap, whereby in use the shoulder pad is for mounting on a wearer's side of the seat belt or harness strap

*Concerning the underlined definitions by intended use see:*

*PCT Internationals Search and Examination Guidelines, Chapter 12 Novelty, Paragraph 12.05 Interpretation of Claims:*

*In interpreting claims for the consideration of novelty, the examiner should have regard to the guidance given in paragraphs 5.20 to 5.41. In particular, the examiner should remember that statements in the claim reciting the purpose or intended use must be evaluated to determine whether the recited purpose or intended use results in a structural difference (or in the case of process claims, a difference in the process steps) between the claimed invention and the prior art. **Non-distinctive characteristics of a particular intended use should be disregarded (see paragraphs 5.21 to 5.23).** For example, a claim to a substance X for use as a catalyst would not be considered to be novel over the same substance known as a dye, unless the use referred to implies a particular form of the substance (for example, the presence of certain additives) which distinguishes it from the known form of the substance.*

the pad having a body (see Fig.2) comprising two zones, the second zone (see the right side of pad (1) in Fig.2) being thicker  
in the dimension of the pad orthogonal to the plane of the seat belt or harness strap used therewith

than the first zone (see the left side of pad (1) in Fig.2),  
and wherein the first zone is for location against the wearer's shoulder and the second zone is for location at a lower height against a lower part of the wearer's torso when in use the wearer is seated in a normal and substantially erect position.

*The shoulder pad of D1 is suitable for being used as underlined above. The intended use does not provide any technical characteristic making the claimed subject-matter novel in view of D1.*

- 2.2 The present application does also not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT in view of document D2 (see Fig.8).
3. Dependent claims 2-12 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, the reasons being as follows:
- 3.1 The subject-matter of claims 2, 3, 6 and 7 is disclosed in D2 and not new in the sense of Article 33(2).
- 3.2 In claim 4, 5 and 10 slight constructional changes are defined which come within the scope of the customary practice followed by persons skilled in the art, especially as the advantages achieved by the tether connection can readily be foreseen. Consequently, the subject-matter of claims 5, 6 and 12 lacks an inventive step.
- 3.3 The subject-matter of claims 8 and 9 consists in the selection of specific dimensions for the thickness of the elements. Such a selection can only be regarded as inventive, if the disclosure presents unexpected effects or properties in relation to these values. However, no such effects or properties are indicated in the application. Hence, no inventive step (Article 33(3) PCT) is present in the subject-matter of claims 8 and 9.
- 3.4 It is also obvious for the skilled person to use the shoulder pad already known from D1 in combination with a vehicle seat belt according to claim 11 also with a child car safety carrier according to claim 12. Hence, claim 11 is not new in the sense of Article 33(2) and claim 12 lacks an inventive step (Article 33(3) PCT).

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CLAIMS:

1. A shoulder pad (30) for use with a vehicle seat belt or harness strap, whereby in use the shoulder pad is for mounting on a wearer's side of the seat belt or harness strap, the pad having a body (32) comprising two zones, the second zone being thicker in the dimension of the pad orthogonal to the plane of the seat belt or harness strap used therewith than the first zone, and wherein the first zone is for location against the wearer's shoulder and the second zone is for location at a lower height against a lower part of the wearer's torso when in use the wearer is seated in a normal and substantially erect position.
2. A shoulder pad as claimed in claim 1, wherein the thickness of the pad body (32) increases gradually from one end to another end thereof.
3. A shoulder pad as claimed in claim 2, further comprising a thin substrate bearing a series of projections (40, 42, 44, 46, 48, 50) of progressively increasing height between the ends of the pad body (32).
4. A shoulder pad as claimed in any preceding claim, including a tether portion to connect the pad (30) to a vehicle seat, the tether portion being at the end of the pad adjacent to the first zone.
5. A shoulder pad as claimed in claim 4, including a tether of doubled back length of narrow strapping (34).
6. A shoulder pad as claimed in any preceding claim, wherein the body (32) is formed from synthetic rubber.

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7. A shoulder pad as claimed in claim 3, wherein the shoulder pad (30) includes a tapering portion, which includes the two zones, the tapering portion also comprising said thin substrate bearing a series of projections of progressively increasing height.

8. A shoulder pad as claimed in claim 7, wherein the substrate suitably has a thickness in the range 0.5 to 1.5 mm, particularly 1.0 mm.

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9. A shoulder pad as claimed in claim 7 or claim 8, wherein the smaller projections in the first (thinner) zone are suitably 3 to 5 mm, preferably 4 mm, thick, giving a total thickness of substrate and projection in the preferable instance of 5 mm; the greater projections in the second (thicker) zone are suitably 8 to 12 mm, preferably 10 mm thick, giving a total thickness of substrate and projection in the preferable instance of 11 mm.

20 10. A shoulder pad as claimed in claim 7, claim 8 or claim 9, wherein the body (32) is attached to peripheral stitching for a tether for connecting the pad to a vehicle seat.

11. A vehicle seat belt for engagement with the shoulder of a user characterised in that it comprises a shoulder pad (30) as claimed in any one of claims 1 to 10.

12. A child car safety carrier having a harness with at least one shoulder strap, characterised in that it comprises a shoulder pad as claimed in anyone of claims 1 to 10.